

Public Meeting on Phosphorus Tracking and Accounting Standard Operating Procedures

Date/Time: Tuesday, April 15, 2022, 12:00 – 1:30 pm

Location: [Microsoft Teams Meeting](#) with in-person option at 1 National Life Drive, Montpelier, VT

Details and supporting materials: available at: <https://dec.vermont.gov/content/public-meeting-phosphorus-tracking-and-accounting-standard-operating-procedures>

Recording of public meeting: available at: https://www.youtube.com/watch?v=t_mojGMhvVI&t=79s

In Attendance:

- Amy Macrellis
- Brian Voigt
- Claire O'Brien
- Clare Ireland
- Clare Madden
- Dan Albrecht
- Emily Bird
- Ethan Swift
- Helen Carr
- Jennifer Callahan
- Jennifer Hopkins
- Jill Arace
- Jon Armstrong
- Mary Perchlik
- Molly Varner
- Rachel Wood
- Thomas Akin

Welcome and Overview of Agenda

- Helen Carr started the public meeting, welcomed those in attendance, and reviewed the agenda.

Presentation Overview

- Helen Carr and Emily bird provided an overview of the Clean Water Service Delivery Act (Act 76 of 2019), DRAFT Phosphorus Tracking and Accounting Standard Operating Procedures, and timeline of public notice and comment period (see [Presentation Slides and Agenda](#)).

Questions and Discussion During Presentation:

- Jill Arace (via Microsoft Teams meeting chat): Can you explain the "total phosphorus reduction efficiency" a bit more? What's the baseline or starting point? Thanks.
 - Helen Carr: The phosphorus reduction efficiency is a percentage. An example: if you had a stormwater bioretention practice, we know there is a certain amount of

runoff, containing pollution, that is going to the practice. We also know that the practice is going to treat or remove a certain percentage of the phosphorus in the form of sediment of excess nutrients. The phosphorus reduction efficiency is that percentage of reduction on average that we would actively be removed from that treatment or practice. The Total Maximum Daily Load (TMDL) gives us those base load starting points based on how many kilograms per year phosphorus we expect to run off from a land use (e.g., parking lot, agricultural field).

- Emily Bird: The TMDL modeling gives us those baseline loading rates and then this percent reduction efficiency gets applied to that for the area (land use) that the practice is treating. In Helen's example, the stormwater treatment practice treats runoff from a certain drainage area. If you're doing a cover crop on an acre of agricultural land, then that drainage area or treatment area would be that acre of cropland that is being covered. That set efficiency is an annual average reduction to be consistent with the units used in the TMDL.
- Jill Arace: In the Clean Water Service Delivery Act it said DEC is going to create a tool for us where we can estimate the phosphorus reductions of any project that we would be proposing. Is that going to be basically an online tool where we just plug in the data points that you highlighted in your example slide then it'll spit out a number and we'll say per the DEC database the estimate phosphorus reduction is X. Is that what it will look like?
 - Helen Carr: Yes, that is the goal. We have an initial calculator tool for stormwater treatment practices (STP), which we call the [STP calculator](#). It asks for the fields needed to calculate a phosphorus reduction value for that project. We plan to develop a tool similar to the STP calculator where you enter certain data and the tool will estimate the phosphorus reduction for that practice.
 - Jill Arace: What is the ability to account for variability (e.g., different social, geographic, geologic, or built infrastructure conditions) at project level with the tool?
 - Emily Bird: Depending on where the project is located and the land use characteristics associated with the project, we may have the ability to pick up on some variability at the project level for tracking and accounting. Those factors can be incorporated into the calculation to a certain degree.
 - Jill Arace: Everyone will be able to see the scores which will be a good plot for the project ranking process.
- Jill Arace: Is the system you are developing here going to be used unilaterally by all agencies for their phosphorus reduction estimates?
 - Helen Carr: Yes, part of the reason we are doing this is to standardize how we are tracking and accounting for phosphorus across the state and be able to compare between agencies. We are currently gathering all the data needed to calculate phosphorus reductions from several agencies and partners (e.g., Agency of Agriculture Food and Markets, Agency of Transportation) through the annual [Clean Water Performance Report](#) process. We are using the methods that we have documented in these draft Standard Operating Procedures, to calculate reductions in a centralized database, so it is standard across the board.

- Emily Bird: The Vermont Clean Water Act set the stage for that level of interagency coordination to take place and are grateful for that partnership. In addition, we are fortunate to have federal partners who have been willing to engage in the data compilation process. For example, Natural Resources Conservation Service has adapted our approach and relies on us to produce their phosphorus reduction estimates. There is still work to be done in terms of standardizing and gaining some efficiencies on the tracking side, such as standardized reporting templates, that we continue to make progress on moving forward.

Public Comment

- No Public Comment was offered.

Public meeting ended at 12:45 pm